

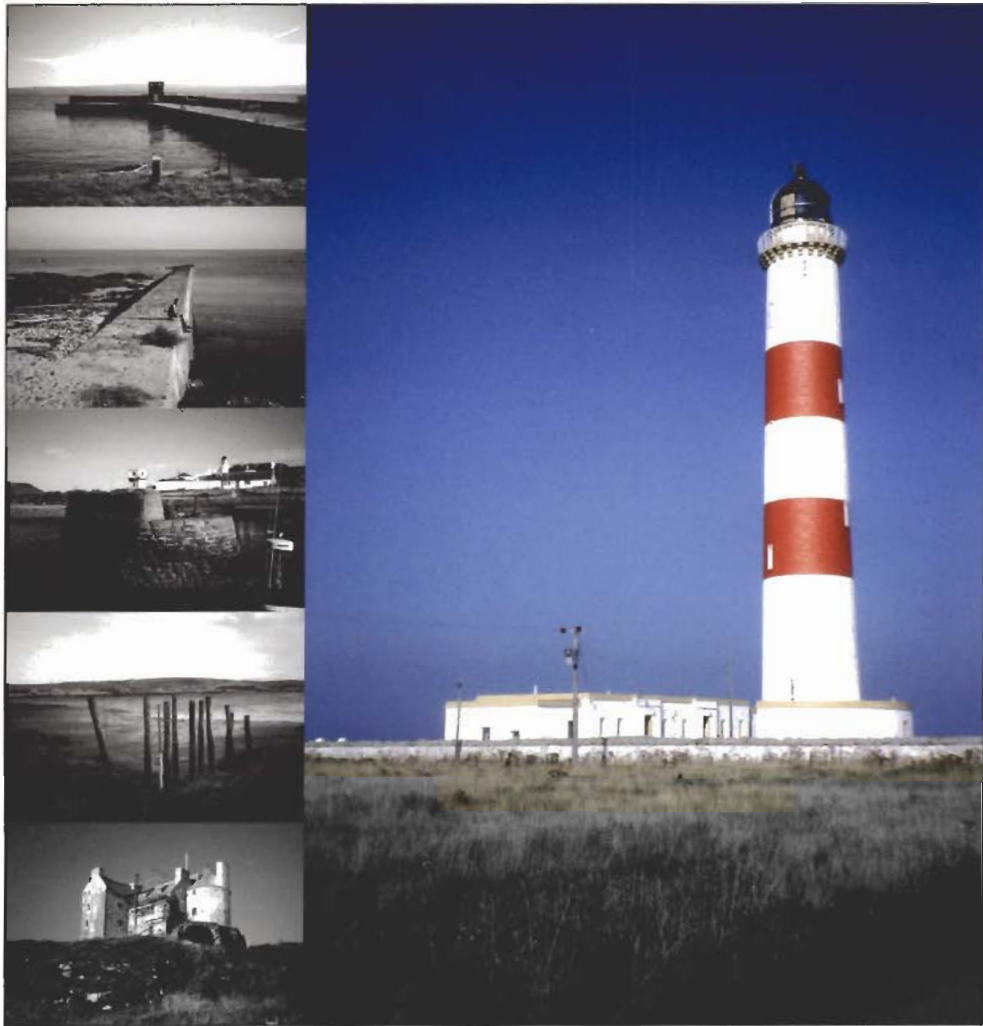
Coastal Assessment Survey Inner Moray Firth

Dingwall to Tarbat Ness

September 1998

VOLUME 2

Map sets 18-31



a report for
HISTORIC SCOTLAND



by the
CENTRE *for* FIELD ARCHAEOLOGY



Map 18: DINGWALL TO ARDULIE POINT

Hinterland Geology and Coastal Geomorphology: Middle Old Red Sandstone forms the basement geology in this unit of coastline. This is overlain by boulder clay and undifferentiated glacial drift deposits. Marine deposits are represented by two raised beaches at Ardulie Point. Here a small foreland forms the northern limit of the Cromarty Bridge crossing. The intertidal environment is dominated by tidal mudflats. Shingle and boulders continue the length of this unit and the foreshore narrows here in contrast to the preceding coastal unit. The hinterland rises sharply away from the Cromarty estuary.

Erosion class: The sheltered position of this unit promotes stability with accretion of mud and shingle on the foreshore. At Ardulie point the bridge abutments and the flanking shoreline are defended by rock armour. The most notable section suffering erosion is the cliff at the ruin of St Brigh's Chapel (NH 577 615). An exposed section of cliff is seriously eroding exposing the buildings fabric. Exposed within the cliff is laminated marine sand and shingle. Attempts to stabilise the cliff edge have been made using seeded netting.

Built Heritage and Archaeology: The western foreshore sites in this area are the north shore complement to those on the preceding map. They consist of timber and stone remains associated with the Dingwall to Alcaig ferry which are possible beacon stances to aid navigation. They also include some fish trap sites, including one at LWM which consists of numerous wooden posts interwoven with wattling. This degree of preservation demonstrates the preservative nature of the intertidal sediments, however, where the post and wattle work are exposed they are prone to erosion by both water and the sediment load. The hinterland archaeology is varied and includes the Dingwall harbour and canal, designed by Telford, linking the former with the navigable channel in the Firth. At the mouth of the canal are the remains of the navigation beacon stances. North east of Dingwall is the Mountrich shell midden complex, situated on the top of a raised sea beach feature and prone to terrestrial weathering. At Lemlair the 12th century St. Brighs chapel and associated burial ground was recorded as being under active coastal erosion and during the survey a number of possible human bones was found on the foreshore below the site.

Map 18: Hinterland Geology and Coastal Geomorphology

1. East of DINGWALL TOWN to ST BRIGHS

NH 573 614

3.3km

Tidal mud flats

Low cliff (10-15m)

Raised beach and marine deposits

This unit comprises a linear stretch of estuarine coast with predominantly raised beach deposits on the hinterland. The foreshore consists of estuarine tidal flats with boulders at the MHWS mark.

2. ST BRIGH'S to ARDULLIE POINT

NH 589 626

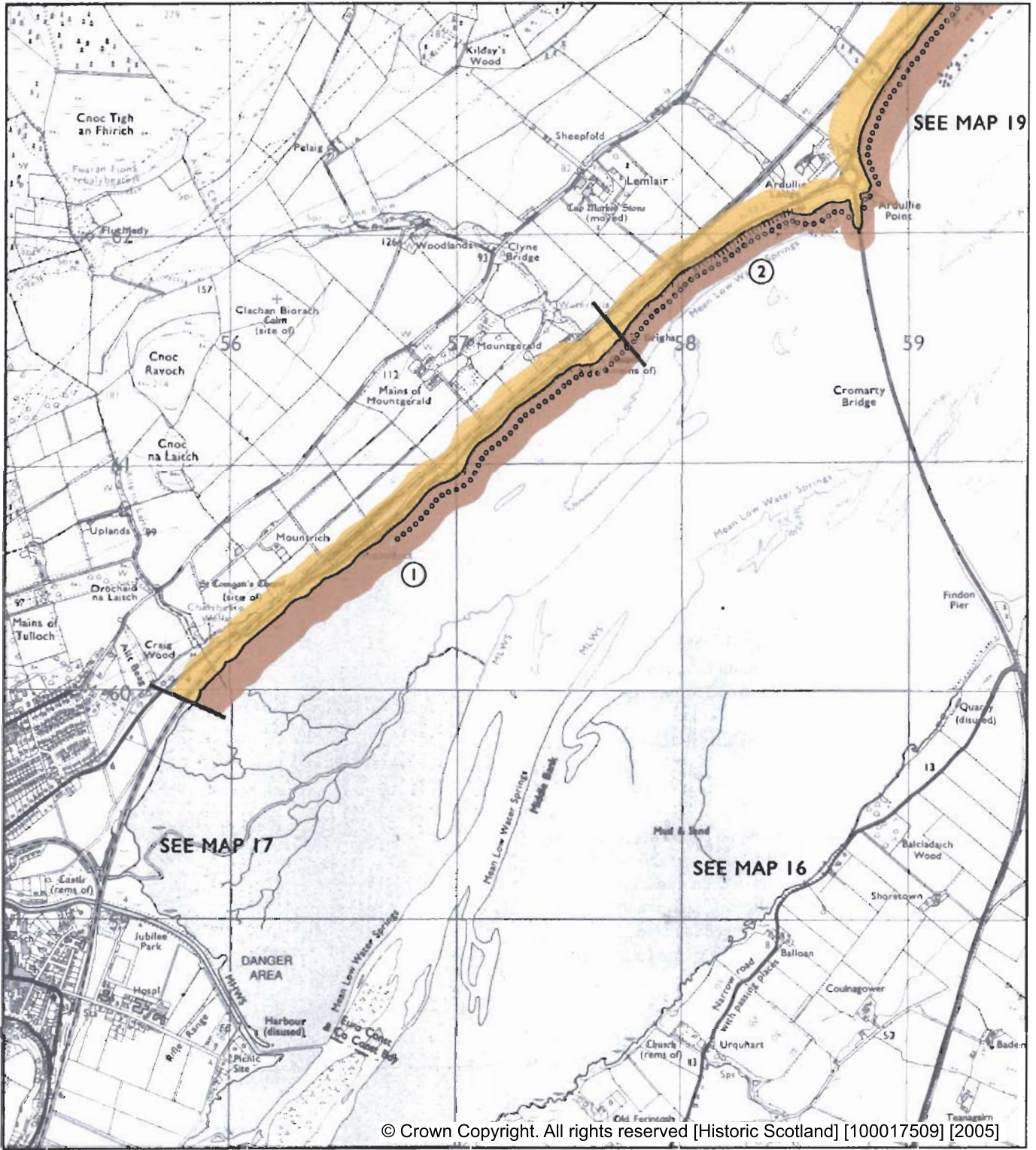
2.6km

Mud flats/shingle

Low cliff (10m)

Raised beach and marine deposits

This coastal cell incorporates Ardullie Point a small headland forming the north side of the Cromarty Bridge. The foreshore consists of mud flats. The hinterland behind rises steeply and comprises raised beach deposits.



© Crown Copyright. All rights reserved [Historic Scotland] [100017509] [2005]

MAP 18: DINGWALL TO ARDULIE POINT

MORAY FIRTH SURVEY Grid ref: NH 55-59/58-63

1:25 000

Basemap: O.S. Pathfinder Series
Sheets 143 & 159
© Crown Copyright Reserved

HINTERLAND GEOLOGY AND FORESHORE GEOMORPHOLOGY

Assessment date: 15 September 1998

Hinterland:

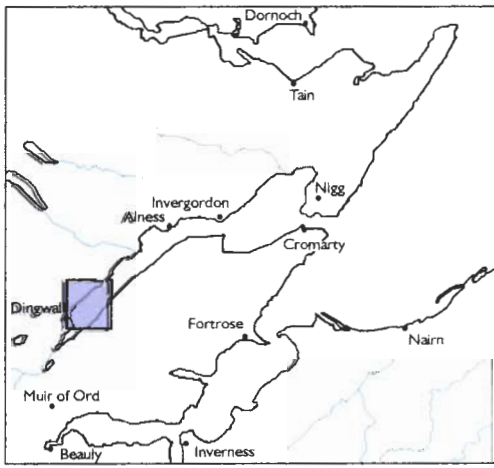
- Drift, boulder clay
- Drift, boulder clay over visible rock
- Raised beach and marine deposits
- Blown sand
- Glacial sand and gravel
- Alluvium

Coast edge:

- Low edge (< 5m tall)
- Cliff over 5m tall
- Man made barrier
- ○ ○ ○ Shingle/storm bank
- ~ ~ ~ Human disturbance

Foreshore:

- Mainly rock platform
- Mainly sand
- Mainly alluvial/marine mud
- Marsh



MAP 18: EROSION

1. CRAIG WOOD to MOUNTRICH

NH 562 604

0.7km

Accreting or stable

Defended coastal edge with saltmarsh communities stabilising the backshore area.

Shingle and mud are accreting on the foreshore.

2. MOUNTRICH

NH 565 606

c. 12-15m

Definitely eroding

Eroding saltmarsh at HWM with cobbles and mud exposed to the low watermark where conditions are accreting.

3. MAINS of MOUNTGERALD

NH 570 610

1.3km

Accreting or stable

Stable cobble and mud beach with extensive mudflats. Boulder dump sea defence protects the coastal edge and the A862 trunk road.

4. St BRIGH'S CHAPEL (RUIN)

NH 577 615

c. 75m

Definitely eroding

The c.3m high gravel and sand cliff is seriously eroding exposing the building fabric of the chapel.

Recently attempts have been undertaken to stabilise the top of the cliff using matting and grass seeding. Erosion is extensive along this section of shoreline owing to the lack of hard defences.

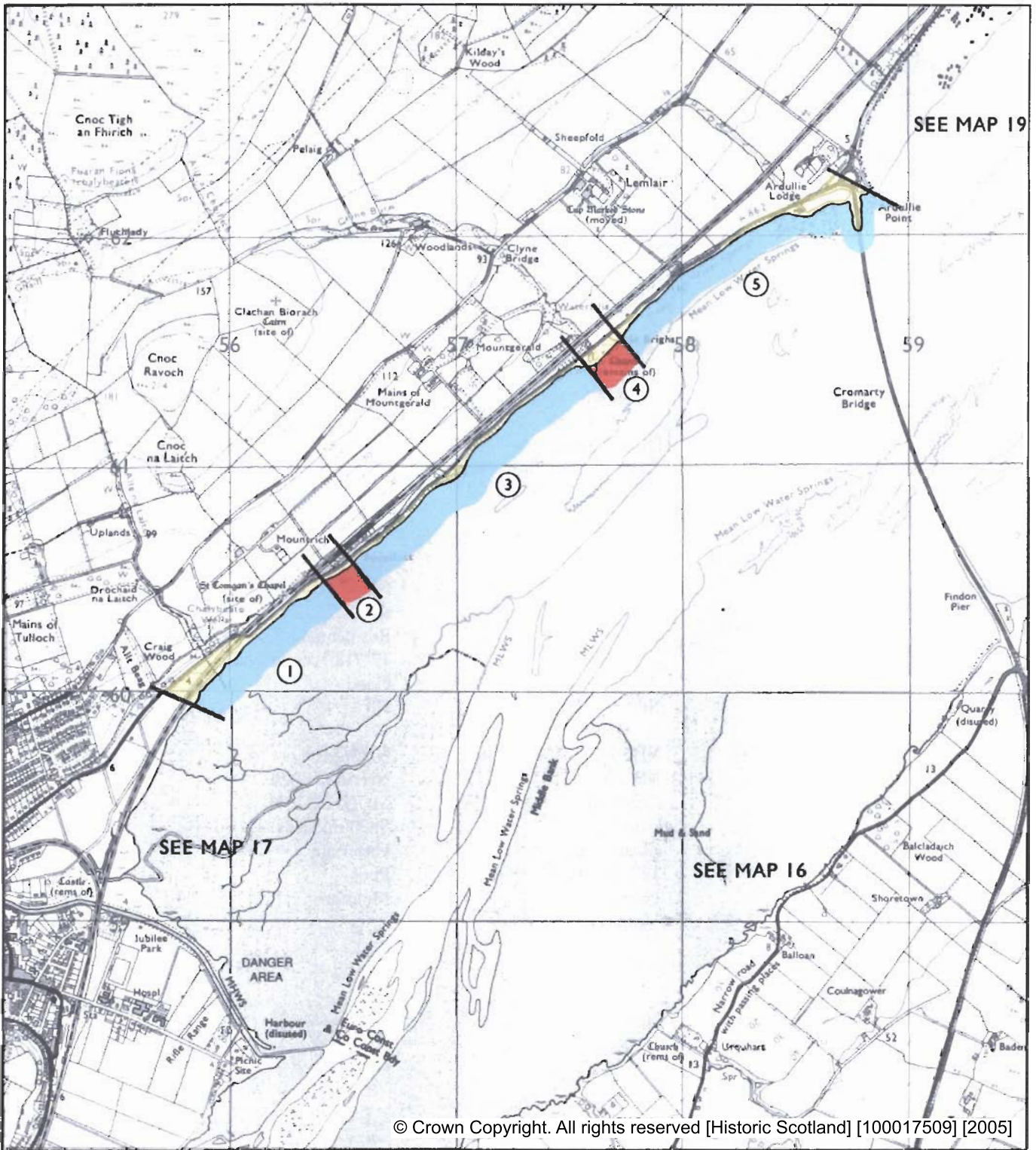
5. St BRIGH'S CHAPEL to ARDULIE POINT

NH 585 621

1.2km

Accreting or stable

This unit is defended by quarried stone to protect the A862 road and the headland of Arduilie Point that holds the northern piers of the Cromarty Bridge. The foreshore is accreting mud, cobbles and mud that are extensively exposed at the LWM.



MAP 18: DINGWALL TO ARDULIE POINT

MORAY FIRTH SURVEY Grid ref: NH 55-59/58-63

1:25 000

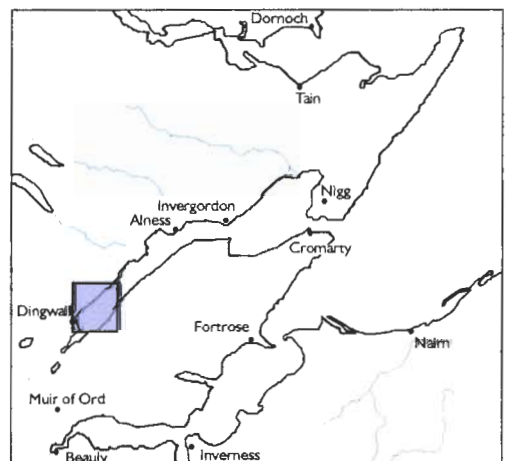
Basemap: O.S. Pathfinder Series
Sheets 143 & 159
© Crown Copyright Reserved

EROSION CLASS

Assessment date: 15 September 1998

Key:

- Definitely accreting
- Accreting or stable
- Stable
- Eroding or stable
- Definitely eroding
- Both accreting and eroding
- No access
- Land below 10m



MAP 18: BUILT HERITAGE AND ARCHAEOLOGY

Sites on the Coastal Edge & Foreshore

NH 5720 6060
MOUNTGERALD
Complex fish trap
Uncertain
Poor
Survey

NH 5755 6140
MOUNTGERALD
Double fish trap
Uncertain
Good
Survey and monitor

NH 5880 6215
ARDULLIE LODGE
Wooden breakwater
20th century AD
Poor
Nil

Sites in the Hinterland

NH55NE 26
NH 5612 5848
DINGWALL
Harbour (disused)
18th/19th century AD
Poor
Monitor

NH55NE 24
NH 5494 5908 - 5615 5842
DINGWALL, River Peffrey
Canal designed by Telford
19th century AD; 1803-21
Fair
Nil

NH 5594 5867
DINGWALL
Firing range
20th century AD
Good
Nil

NH56SE 3 - Scheduled
NH 5765 6150
LEMLAIR, ST. BRIGHS
CHAPEL
Chapel; burial ground
12th century AD or earlier
Poor
Monitor

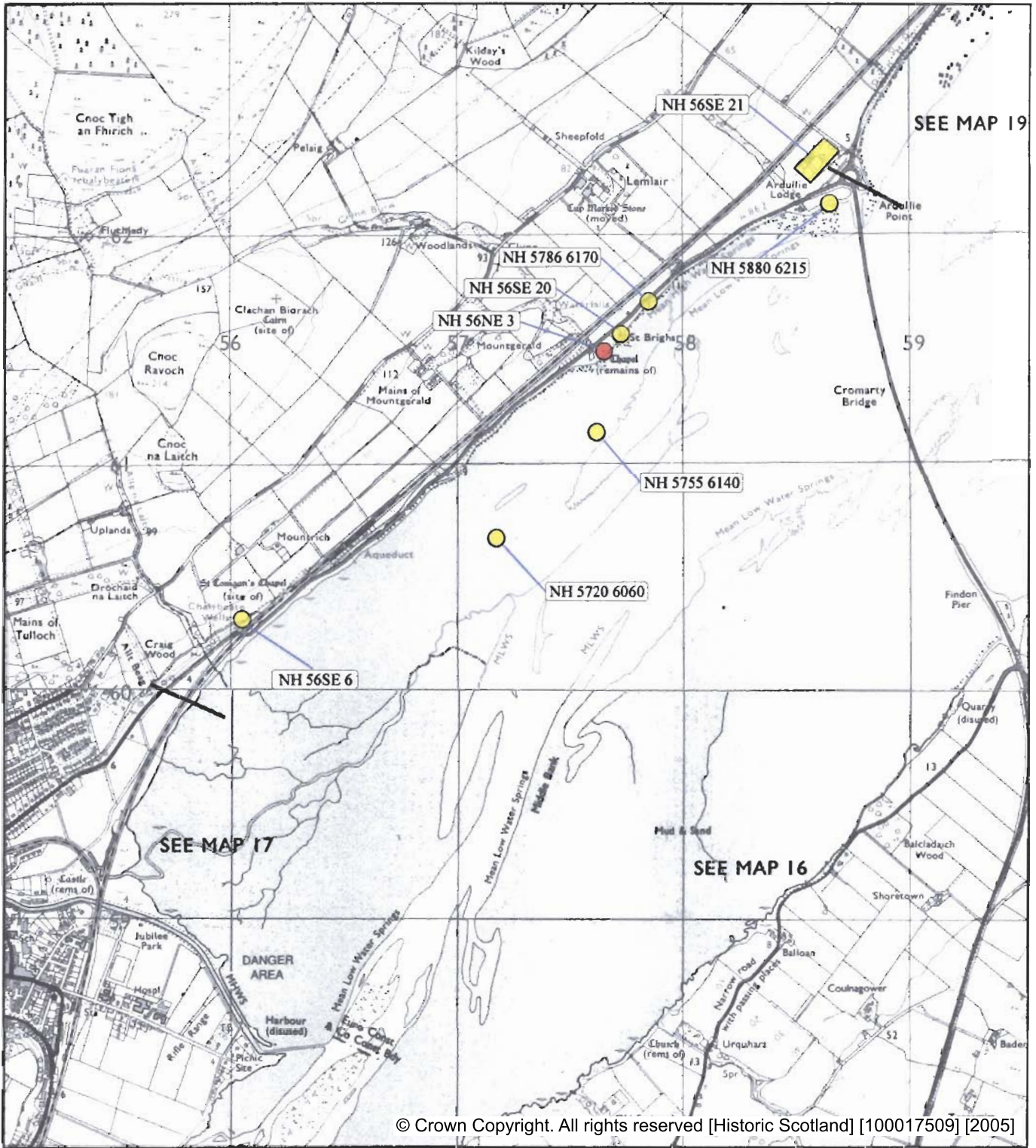
Sites in the Hinterland

NH56SE 20
NH 5772 6155
CILLE BHREA, St Brighs
Residential house
18th/19th century AD
Good
Nil

NH 5786 6170
LEMLAIR
Rectilinear structures
Uncertain
Good
Survey

NH56SE 21
NH 5861 6232
ARDULLIE LODGE
Residential house; designed
17th/18th century AD
Good
Nil

NH56SE 6
NH 5602 6029
MOUNTRICH
Shell middens
Uncertain
Poor
Monitor



MAP 18: DINGWALL TO ARDULIE POINT

MORAY FIRTH SURVEY Grid ref: NH 55-59/58-63

1:25 000

Basemap: O.S. *Pathfinder* Series
Sheets 143 & 159
© Crown Copyright Reserved

BUILT HERITAGE AND ARCHAEOLOGY

Assessment period: September 1998

Key:

Protected Ancient Monument,
or area of designated wreck

Listed Historic Building

Monument formally proposed by
Historic Scotland for scheduling,
or wreck for designation

Other known Ancient Monuments,
or Undesignated wreck

Designated Landscape

Insufficient information;
more work needed

Probably archaeologically sterile

